

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Previously Presented) receiver of a mobile radio terminal in a telecommunication system, said receiver including a radio frequency signal generator cooperating with a frequency transposer to transpose the frequency of a received signal to a lower frequency, a high-pass filter for filtering a static component and a dynamic component of interference to said received signal induced by the operation of said radio frequency generator and said frequency transposer, and a digitizer, in which device said high-pass filter has a predetermined cut-off frequency to eliminate said static component and a portion of said dynamic component before said signal enters said digitizer, a residual dynamic component of said interference being eliminated by a digital filter placed after said digitizer and a corrector, said corrector comprising a subtractor for subtracting said residual dynamic component from the signal coming from said digitizer.

2. (Original) The device claimed in claim 1 wherein said digital filter calculates said residual dynamic component and supplies said corrector with a signal representative of said residual dynamic component.

3. (Original) The device claimed in claim 1 wherein said digital filter is a high-pass filter.

4. (Canceled)

5. (Previously Presented) The device claimed in claim 1 wherein said subtractor calculates the difference between said signal coming from said digitizer and a signal representative of said residual dynamic component coming from said digital filter.

6. (Currently Amended) A method of estimating a residual dynamic component of interference to a received signal in a receiver of a mobile radio terminal, said receiver including a radio frequency signal generator cooperating with a frequency transposer to transpose the frequency of a received signal to a lower frequency, a high-pass filter for filtering a static component and a dynamic component of interference to said received signal induced by the operation of said radio frequency generator and said frequency transposer, and a digitizer, in which device said high-pass filter has a predetermined cut-off frequency to eliminate said static component and a portion of said dynamic component before said signal enters said digitizer, a residual dynamic component of said interference being eliminated by a digital filter placed after said digitizer and which estimates said residual dynamic component, and a corrector which subtracts said estimated residual dynamic component from an output of said digitizer, where the signal is transmitted in the form of frames divided into time slots, which method includes the following steps:

calculating an average value of said signal over a time contained within a time slot;

determining a spacing expressed as a number of time slots between two consecutive calculations of said average value;

determining the number of calculated average values to be considered in calculating said residual dynamic component; ~~and~~

calculating said residual dynamic component of said interference to said received signal; ~~and~~

supplying said calculated residual dynamic component to said corrector.

7. (Previously Presented) The method claimed in claim 6 wherein said average value of said signal is calculated over a time slot portion less than an entire time slot.

8. (Previously Presented) The method claimed in claim 6 wherein the final step first calculates an instantaneous estimate of said residual dynamic component and then averages said estimate, applying a forget factor to take into account a history of estimates of said residual dynamic component.

9. (Original) The method claimed in claim 6 wherein said steps are implemented in said digital filter placed after said digitizer.

10. (Currently Amended) A method of removing interference from a received signal in a receiver of a mobile radio terminal, said method including the steps of removing a portion of a dynamic component of interference from said signal to form a partially corrected signal,

estimating a residual dynamic component of said interference to a received signal in a receiver of a mobile radio terminal and subtracting said estimated residual dynamic component from said partially corrected signal, which method wherein said estimating step includes the following steps:

- calculating an average value of said signal over a time contained within a time slot;
- determining a spacing expressed as a number of time slots between two consecutive calculations of said average value;
- determining the number of calculated average values to be considered in calculating said residual dynamic component; and
- calculating said residual dynamic component of said interference to said received signal.

11. (Previously Presented) The method claimed in claim 10 wherein said average value of said signal is calculated over a time slot portion less than an entire time slot.

12. (Previously Presented) The method claimed in claim 10 wherein the final step first calculates an instantaneous estimate of said residual dynamic component and then averages said estimate, applying a forget factor to take into account a history of estimates of said residual dynamic component.

13. (Previously Presented) The method claimed in claim 10, wherein said receiver includes a radio frequency signal generator cooperating with a frequency transposer to transpose the frequency of a received signal to a lower frequency, a high-pass filter for filtering a static component and a dynamic component of interference to said received signal induced by the operation of said radio frequency generator and said frequency transposer, and a digitizer, in which device said high-pass filter has a predetermined cut-off frequency to eliminate said static component and a portion of said dynamic component before said signal enters said digitizer, said residual dynamic component of said interference being eliminated by a digital filter placed after said digitizer and a corrector, where the signal is transmitted in the form of frames divided into time slots.

14. (Previously Presented) The method claimed in claim 13 wherein said steps are implemented in said digital filter.